AMENDMENT IN THE CLAIMS

110. (Currently Amended) A method of preparing a xenotransplantable porcine islet [[cells]] comprising the steps of:

(i) harvesting the pancreas of a piglet, the piglet having an age of between -20 to +10 days relative to full term gestation,

(ii) exposing the harvested pancreas ~~pancreatic islet cells~~ to nicotinamide, [[and]]

(iii) extracting pancreatic .beta. [[_]] islet cells from the harvested pancreas [[;]] . and

(iv) encapsulating the pancreatic .beta. islet cells with a biocompatible xenotranplantable material ; the method resulting in a xenotransplantable islet [[cell]].

111. (Currently Amended) The method as claimed in claim 110 wherein [[the]] the piglet has an age of between -7 and +10 days relative to full term gestation.

112. (Previously Presented) The method as claimed in claim 110 wherein the step of extraction includes the use of human Liberase.

113. (Previously Presented) The method of claim 110 wherein the harvested pancreas is bathed in a mammalian albumin solution substantially free of microbiological agents.

114. (Previously Presented) The method of claim 113 wherein the mammalian albumin comprises human serum albumin (HSA).

115. (Cancelled)

116. (Currently Amended) The method as claimed in claim 110 further comprising [[the]] a step of treating the islets with a compound selected from the group consisting of: Insulin-Like Growth Factor 1 (IGF-1) and the N-terminal tripeptide of IGF-1 (GPE).

117. (Currently Amended) The method as claimed in claim 116 wherein the compound ~~comprises~~ consists of GPE.

118. (Cancelled).

119. (Canceled).

120. (Currently Amended) The method as claimed in claim 110 further comprising [[the]] a step of contacting the pancreatic β islet cell with a trauma protecting agent.

121. (Previously Presented) The method as claimed in claim 120 wherein the trauma protecting agent comprises an anesthetic agent.

122. (Previously Presented) The method as claimed in claim 121 wherein the anaesthetic agent comprises lignocaine.

123. (Currently Amended) The method as claimed in claim 110 further comprising [[the]] a step of mechanically reducing the harvested pancreas in the presence of an islet trauma protecting agent, wherein the step is performed following step (ii).

124. (Cancelled).

125. (Currently Amended) The method as claimed in claim [[124]] 110 wherein the ~~quinalone~~ quinolone antibiotic comprises ciproxin.

126- 151. (Cancelled)

152. (Currently Amended) A method of preparing a xenotransplantable porcine islet comprising the steps of:

(i) providing a piglet, the piglet having an age of between -20 and +10 days relative to full term gestation,

(ii) harvesting the pancreas of the piglet,

(iii) extracting pancreatic .beta. islet cells from the harvested pancreas and simultaneously exposing the .beta. islet cells to nicotinamide, and

(iv) encapsulating the .beta. islet cells with a biocompatible xenotranplantable material ;

the method resulting in a xenotransplantable islet [[cell]].

153. (Currently Amended) A method of preparing a xenotransplantable porcine islet comprising the steps of:

(i) providing a piglet, the piglet having an age of between -20 and +10 days relative to full term gestation,

(ii) harvesting the pancreas of the piglet and simultaneously exposing the [[.beta. islet cells]] harvested pancreas to nicotinamide, [[and]]

(iii) extracting pancreatic .beta. islet cells from the harvested pancreas, and

(iv) encapsulating the .beta. islet cells with a biocompatible xenotranplantable material; the method resulting in a xenotransplantable islet [[cell]].

154. (Previously Presented) The method of claim 110 wherein the piglet has not reached full term gestation.

155. (Currently Amended) The method of claim [[153]] 152 wherein the piglet has not reached full term gestation.

156. (Currently Amended) The method of claim [[154]] 153 wherein the piglet has not reached

full term gestation.

157. (New) The method of claim 152 wherein the piglet has an age of between -7 and +10 days relative to full term gestation.

158. (New) The method of claim 152 wherein the step of extraction includes the use of human liberase.

159. (New) The method of claim 152 wherein the harvested pancreas is bathed in a mammalian albumin solution substantially free of microbiological agents.

160. (New) The method of claim 159 wherein the mammalian albumin comprises human serum albumin (HSA).

161. (New) The method of claim 152 further comprising a step of exposing the harvested pancreas to a trauma protecting agent, wherein the step is performed following step (ii).

162. (New) The method of claim 161 wherein the trauma protecting agent comprises an anaesthetic agent.

163. (New) The method of claim 162 wherein the anaesthetic agent comprises a phospholipase A_2 inhibitor.

164. (New) The method of claim 163 wherein the phospholipase A_2 inhibitor comprises lignocaine.

165. (New) The method of claim 152 further comprising a step of contacting the .beta. islet cells with a compound selected from the group consisting of insulin-like growth factor 1 (IGF-1) and

the N-terminal tripeptide of IGF-1, wherein the step is performed simultaneously with step (iii).

166. (New) the method of claim 165 wherein the compound consists of the N-terminal tripeptide of IGF-1.

167. (New) The method of claim 152 further comprising a step of exposing the harvested pancreas to a quinolone antibiotic, wherein the step is performed following step (ii).

168. The method of claim 167 wherein the quinolone antibiotic comprises ciprofloxacin.

169. (New) The method of claim 153 wherein the piglet has an age of between -7 and +10 days relative to full term gestation.

170. (New) The method of claim 153 wherein the step of extraction includes the use of human liberase.

171. (New) The method of claim 153 wherein the harvested pancreas is bathed in a mammalian albumin solution substantially free of microbiological agents.

172. (New) The method of claim 171 wherein the mammalian albumin comprises human serum albumin (HSA).

173. (New) The method of claim 153 further comprising a step of exposing the harvested pancreas to a trauma protecting agent, wherein the step is performed following step (ii).

174. (New) The method of claim 173 wherein the trauma protecting agent comprises an anaesthetic agent.

175. (New) The method of claim 174 wherein the anaesthetic agent comprises a phospholipase A_2 inhibitor.

176. (New) The method of claim 175 wherein the phospholipase A_2 inhibitor comprises lignocaine.

177. (New) The method of claim 153 further comprising a step of contacting the β islet cells with a compound selected from the group consisting of insulin-like growth factor 1 (IGF-1) and the N-terminal tripeptide of IGF-1, wherein the step is performed simultaneously with step (iii).

178. (New) The method of claim 177 wherein the compound consists of the N-terminal tripeptide of IGF-1.

179. (New) The method of claim 152 further comprising a step of exposing the harvested pancreas to a quinolone antibiotic, wherein the step is performed following step (ii).

180. The method of claim 179 wherein the quinolone antibiotic comprises ciprofloxacin.

181. (New) A method of preparing a xenotransplantable porcine islet comprising the steps of:

(i) harvesting the pancreas of a piglet, the piglet having an age of between -20 to +10 days relative to full term gestation,

(ii) exposing the harvested pancreas to nicotinamide, and

(iii) extracting pancreatic .beta. islet cells from the harvested pancreas and simultaneously contacting the pancreatic .beta. islet cells with a quinolone antibiotic; the method resulting in a xenotransplantable islet.

182. (New) The method of claim 181 wherein the piglet has an age of between -7 and +10 days relative to full term gestation.

183. (New) The method of claim 181 wherein the step of extraction includes the use of human liberase.

184. (New) The method of claim 181 wherein the harvested pancreas is bathed in a mammalian albumin solution substantially free of microbiological agents.

185. (New) The method of claim 184 wherein the mammalian albumin comprises human serum albumin (HSA).

186. (New) The method of claim 181 further comprising a step of exposing the harvested pancreas to a trauma protecting agent, wherein the step is performed following step (ii).

187. (New) The method of claim 186 wherein the trauma protecting agent comprises an anaesthetic agent.

188. (New) The method of claim 187 wherein the anaesthetic agent comprises a phospholipase A_2 inhibitor.

189. (New) The method of claim 188 wherein the phospholipase A_2 inhibitor comprises lignocaine.

190. (New) The method of claim 181 further comprising a step of contacting the .beta. islet cells with a compound selected from the group consisting of insulin-like growth factor 1 (IGF-1) and the N-terminal tripeptide of IGF-1, wherein the step is performed simultaneously with step (iii).

191. (New) The method of claim 190 wherein the compound consists of the N-terminal tripeptide of IGF-1.

192. The method of claim 181 wherein the quinolone comprises ciprofloxacin.

193. (New) The method of claim 181 further comprising a step of encapsulating the .beta. islet cells with a biocompatible xenotranplantable material, wherein the step is performed following step (iii).

194. (New) A method of preparing a xenotransplantable porcine islet comprising the steps of:

(i) harvesting the pancreas of a piglet, the piglet having an age of between -20 to +10 days relative to full term gestation,

(ii) exposing the harvested pancreas to nicotinamide, and

(iii) extracting pancreatic .beta. islet cells from the harvested pancreas and simultaneously contacting the pancreatic .beta. islet cells with a trauma protecting agent; the method resulting in a xenotransplantable islet.

195. (New) The method of claim 194 wherein the piglet has an age of between -7 and +10 days relative to full term gestation.

196. (New) The method of claim 194 wherein the step of extraction includes the use of human liberase.

197. (New) The method of claim 194 wherein the harvested pancreas is bathed in a mammalian albumin solution substantially free of microbiological agents.

198. (New) The method of claim 197 wherein the mammalian albumin comprises human serum albumin (HSA).

anaesthetic agent.

200. (New) The method of claim 199 wherein the anaesthetic agent comprises a phospholipase A_2 inhibitor.

201. (New) The method of claim 200 wherein the phospholipase A_2 inhibitor comprises lignocaine.

202. (New) The method of claim 194 further comprising a step of contacting the .beta. islet cells with a compound selected from the group consisting of insulin-like growth factor 1 (IGF-1) and the N-terminal tripeptide of IGF-1, wherein the step is performed simultaneously with step (iii).

203. (New) the method of claim 202 wherein the compound consists of the N-terminal tripeptide of IGF-1.

204. (New) The method of claim 194 further comprising a step of exposing the harvested pancreas to a quinolone antibiotic, wherein the step is performed following step (ii).

205. The method of claim 204 wherein the quinolone ~~antibiotic~~ comprises ciprofloxacin.

206. (New) The method of claim 194 further comprising a step of encapsulating the .beta. islet cells with a biocompatible xenotranplantable material, wherein the step is performed following step (iii).

207. (New) A method of using the xenotransplantable porcine islet of claim 110 for decreasing the requirement for insulin in a mammalian patient suffering from diabetes, the method comprising the steps of:

(i) treating the mammalian patient with oral nicotinamide,

(ii) feeding the mammalian patient a substantially casein-free diet, and

(iii) transplanting into the mammalian patient an effective amount of the xenotransplantable porcine islet of claim 110; the method thereby decreasing the requirement for insulin in the mammalian patient.

208. (New) A method of using the xenotransplantable porcine islet of claim 152 for decreasing the requirement for insulin in a mammalian patient suffering from diabetes, the method comprising the steps of:

(i) treating the mammalian patient with oral nicotinamide,

(ii) feeding the mammalian patient a substantially casein-free diet, and

(iii) transplanting into the mammalian patient an effective amount of the xenotransplantable porcine islet of claim 152; the method thereby decreasing the requirement for insulin in the mammalian patient.

209. (New) A method of using the xenotransplantable porcine islet of claim 153 for decreasing the requirement for insulin in a mammalian patient suffering from diabetes, the method comprising the steps of:

(i) treating the mammalian patient with oral nicotinamide,

(ii) feeding the mammalian patient a substantially casein-free diet, and

(iii) transplanting into the mammalian patient an effective amount of the xenotransplantable porcine islet of claim 153; the method thereby decreasing the requirement for insulin in the mammalian patient.

210. (New) A method of using the xenotransplantable porcine islet of claim 181 for decreasing the requirement for insulin in a mammalian patient suffering from diabetes, the method comprising the steps of:

(i) treating the mammalian patient with oral nicotinamide,

(ii) feeding the mammalian patient a substantially casein-free diet, and

(iii) transplanting into the mammalian patient an effective amount of the xenotransplantable porcine islet of claim 183; the method thereby decreasing the requirement for insulin in the mammalian patient.

211. (New) A method of using the xenotransplantable porcine islet of claim 194 for decreasing the requirement for insulin in a mammalian patient suffering from diabetes, the method comprising the steps of:

(i) treating the mammalian patient with oral nicotinamide,

(ii) feeding the mammalian patient a substantially casein-free diet, and

(iii) transplanting into the mammalian patient an effective amount of the xenotransplantable porcine islet of claim 194; the method thereby decreasing the requirement for insulin in the mammalian patient.